IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A multivalent F_v antibody construct having at least four variable domains [which], wherein said vaiable domains are linked with one another via [the] a peptide [linkers] linker 1, a peptide linker 2 and a peptide linker 3, wherein [the] said peptide [linkers] linker 1 and said peptide linker 3 have [0] about 1 to about 10 amino acids.

2. (Amended) The F_v antibody construct [according to claim] of Claim 1, wherein [the] said peptide [linkers] linker 1 and peptide linker 3 have the amino acid sequence GG.

3. (Amended) The F_v antibody construct [according to claim] of Claim 1 [or 2], wherein [the] said F_v antibody construct is bivalent.

4. (Amended) The F_v antibody construct [according to claim] of Claim 3, wherein [the] said peptide linker 2 has about 11 to about 20 amino acids.

5. (Amended) The F_v antibody construct [according to claim] of Claim 3 or 4, wherein [the] said peptide linker 2 has the amino acid sequence $(G_4S)_4$.

6. (Amended) The F_v antibody construct [according to claim] of Claim 1 [or 2], wherein [the] said F_v antibody construct is tetravalent.

7. (Amended) The F_v antibody construct [according to claim] of Claim 6, wherein [the] said peptide linker 2 has about 3 to about 10 amino acids.

8. (Amended) The F_v antibody construct [according to claim] of Claim 6 or 7, wherein [the] said peptide linker 2 comprises the amino acid sequence GGPGS.

9. (Amended) The F_v antibody construct [according to any of claims] of Claim 1 [to 8], wherein [the] said F_v antibody construct is multispecific.

10. (Amended) The F_v antibody construct [according to claim] of Claim 9, wherein [the] said F_v antibody construct is bispecific.

11. (Amended) The F_v antibody construct [according to any of claims] of Claim 1 [to 8], wherein [the] said F_v antibody construct is monospecific.

12. (Amended) A method of producing the multivalent F_v antibody construct [according to any of claims] of Claim 1 [to 11, wherein DNAs coding for the], comprising:

(a) ligating nucleic acids encoding a peptide [linkers] linker 1, a peptide linker 2 and a peptide linker 3 [are ligated] with [DNAs coding for the] nucleic acids encoding four variable domains of an F_v antibody construct such that [the] said peptide [linkers] linker 1, 2, and 3 link the variable domains with one another; and

(b) subcloning the [resulting DNA molecule is expressed in] nucleic acid of step (a) into an expression plasmid.

13. (Amended) [Expression] An expression plasmid [coding for the multivalent F_v antibody construct according to any of claims 1 to 11] comprising the nucleic acid of Claim 22.

14. (Amended) The expression plasmid [according to claim] of Claim 13, [namely] wherein said expression plasmid is pDISC3x19-LL as deposited with DSM.

15. (Amended) The expression plasmid [according to claim] of Claim 13, [namely] wherein said expression plasmid is pDISC3x19-SL as deposited with DSM.

16. (Amended) The expression plasmid [according to claim] of Claim 13, [namely] wherein said expression plasmid is pPIC-DISC-LL as deposited with DSM.

17. (Amended) The expression plasmid [according to claim] of Claim 13, [namely] wherein said expression plasmid is pPIC-DISC-SL as deposited with DSM.

18. (Amended) The expression plasmid [according to claim] of Claim 13, [namely] wherein said expression plasmid is pDISC5-LL as deposited with DSM.

19. (Amended) The expression plasmid [according to claim] of Claim 13, [namely] wherein said expression plasmid is pDISC5-SL as deposited with DSM.

20. (Amended) [Use of] A composition comprising the multivalent F_v antibody construct [according to any] of [claims] Claim 1 [to 11] for [the] diagnosis and/or treatment of [diseases] a disease.

21. (Amended) [Use according to claim] The composition of Claim 20, wherein [the diseases are] said disease is a viral, a bacterial or a tumoral [diseases] disease.

Please add the following new Claims 22-25:

22. (New) A nucleic acid encoding the F_v antibody construct of Claim 1.

23. (New) A host cell comprising the expression plasmid of Claim 13.

24. (New) A method of treating a disease, comprising administering the composition of Claim 20.

25. (New) A method of making a multivalent F_v antibody construct, comprising cultivating the host cell of Claim 23 under conditions that said multivalent F_v antibody construct is expressed.

CLAIMS

WHAT IS CLAIMED:

1. A multivalent F_v antibody construct having at least four variable domains which are linked with one another via the peptide linkers 1, 2 and 3.

2. The F_v antibody construct according to claim 1, wherein the peptide linkers 1 and 3 have 0 to 10 amino acids.

3. The F_v antibody construct according to claim 2, wherein the peptide linkers 1 and 3 have the amino acid sequence GG.

4. The F_v antibody construct according to any of claims 1 to 3, wherein the F_v antibody construct is bivalent.

5. The F_v antibody construct according to claim 4, wherein the peptide linker 2 has 11 to 20 amino acids.

6. The F_v antibody construct according to claim 4 or 5, wherein the peptide linker 2 has the amino acid sequence $(G_4S)_4$.

7. The F_v antibody construct according to any of claims 1 to 3, wherein the F_v antibody construct is tetravalent.

8. The F_v antibody construct according to claim 7, wherein the peptide linker 2 has 3 to 10 amino acids

9. The F_v antibody construct according to claim 7 or 8, wherein the peptide linker 2 comprises the amino acid sequence GGPGS.

10. The F_v antibody construct according to any of claims 1 to 9, wherein the F_v antibody construct is multispecific.

11. F_v antibody construct according to claim 10, wherein the F_v antibody construct is bispecific.

12. The F_v antibody construct according to any of claims 1 to 9, wherein the F_v antibody construct is monospecific.

13. A method of producing the multivalent F_v antibody construct according to any of claims 1 to 12, wherein DNAs coding for the peptide linkers 1, 2 and 3 are ligated with DNAs coding for the four variable domains of an F_v antibody construct such that the peptide linkers link the variable domains with one another and the resulting DNA molecule is expressed in an expression plasmid.

14. Expression plasmid coding for the multivalent F_v antibody construct according to any of claims 1 to 12.

15. The expression plasmid according to claim 14, namely pDISC3x19-LL.

16. The expression plasmid according to claim 14, namely pDISC3x19-SL.

17. The expression plasmid according to claim 14, namely pPIC-DISC-LL.

18. The expression plasmid according to claim 14, namely pPIC-DISC-SL.

19. The expression plasmid according to claim 14, namely pDISC5-LL.

20. The expression plasmid according to claim 14, namely pDISC5-SL.

21. Use of the multivalent F_v antibody construct according to any of claims 1 to 12 for the diagnosis and/or treatment of diseases.

22. Use according to claim 21, wherein he diseases are viral, bacterial or tumoral diseases.

Claims As Amended In Response To Written Opinion

1. A multivalent F_V antibody construct having at least four variable domains which are linked with one another via the peptide linkers 1, 2 and 3, wherein the peptide linkers 1 and 3 have 0 to 10 amino acids.

2. The F_V antibody construct according to claim 1, wherein the peptide linkers 1 and 3 have the amino acid sequence GG.

3. The F_V antibody construct according to claim 1 or 2, wherein the F_V antibody construct is bivalent.

4. The F_V antibody construct according to claim 3, wherein the peptide linker 2 has 11 to 20 amino acids.

5. The F_V antibody construct according to claim 3 or 4, wherein the peptide linker 2 has the amino acid sequence $(G_4S)_4$.

6. The F_V antibody construct according to claim 1 or 2, wherein the F_V antibody construct is tetravalent.

7. The F_V antibody construct according to claim 6, wherein the peptide linker 2 has 3 to 10 amino acids.

8. The F_V antibody construct according to claim 6 or 7, wherein the peptide linker 2 comprises the amino acid sequence GGPGS.

9. The F_V antibody construct according to any of claims 1 to 8, wherein the F_V antibody construct is multispecific.

10. F_V antibody construct according to claim 9, wherein the F_V antibody construct is bispecific.

11. The F_V antibody construct according to any of claims 1 to 8, wherein the F_V antibody construct is monospecific.

12. A method of producing the multivalent F_V antibody construct according to any of claims 1 to 11, wherein DNAs coding for the peptide linkers 1, 2 and 3 are ligated with DNAs coding for the four variable domains of an F_V antibody construct such that the peptide linkers link the variable domains with one another and the resulting DNA molecule is expressed in an expression plasmid.

13. Expression plasmid coding for the multivalent F_V antibody construct according to any of claims 1 to 11.

14. The expression plasmid according to claim 13, namely pDISC3x19-LL.

15. The expression plasmid according to claim 13, namely pDISC3x19-SL.

16. The expression plasmid according to claim 13, namely pPIC-DISC-LL.

17. The expression plasmid according to claim 13, namely pPIC-DISC-SL.

18. The expression plasmid according to claim 13, namely pDISC5-LL.

19. The expression plasmid according to claim 13, namely pDISC6-SL.

20. Use of the multivalent F_V antibody construct according to any of claims 1 to 11 for the diagnosis and/or treatment of diseases.

21. Use according to claim 20, wherein the diseases are viral, bacterial or tumoral diseases.